



## Gulf of Mexico Harmful Algal Bloom Bulletin

Region: Texas

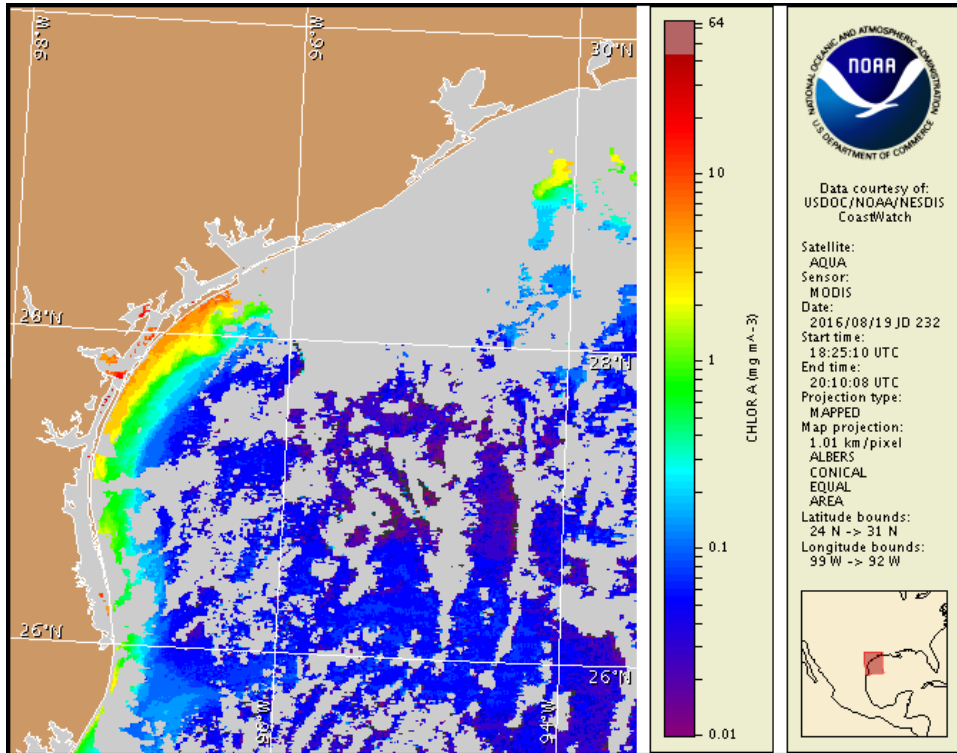
Monday, 22 August 2016

NOAA National Ocean Service

NOAA Satellite and Information Service

NOAA National Weather Service

Last bulletin: Monday, August 15, 2016



Satellite chlorophyll image with possible *K. brevis* HAB areas shown by red polygon(s), when applicable. Points represent cell concentration sampling data from August 12 to 18: red (high), orange (medium), yellow (low b), brown (low a), blue (very low b), purple (very low a), pink (present), and green (not present). Cell count data are provided by Texas Parks and Wildlife Department. For a list of sample providers and a key to the cell concentration categories, please see the HAB-OFS bulletin guide:

[http://tidesandcurrents.noaa.gov/hab/hab\\_publication/habfs\\_bulletin\\_guide.pdf](http://tidesandcurrents.noaa.gov/hab/hab_publication/habfs_bulletin_guide.pdf)

Detailed sample information can be obtained through the Texas Parks and Wildlife Department at:

<http://www.tpwd.state.tx.us/landwater/water/enviroconcerns/hab/redtide/status.phtml>

To see previous bulletins and forecasts for other Harmful Algal Bloom Bulletin regions, visit the NOAA Harmful Algal Bloom Operational Forecast System bulletin archive:

<http://tidesandcurrents.noaa.gov/hab/bulletins.html>

## Conditions Report

*Karenia brevis* (commonly known as Texas red tide) ranges from not present to very low concentrations along the coast of Texas. No respiratory irritation is expected alongshore Texas Monday, August 22 through Monday, August 29.

Check [http://tidesandcurrents.noaa.gov/hab/beach\\_conditions.html](http://tidesandcurrents.noaa.gov/hab/beach_conditions.html) for recent, local observations.

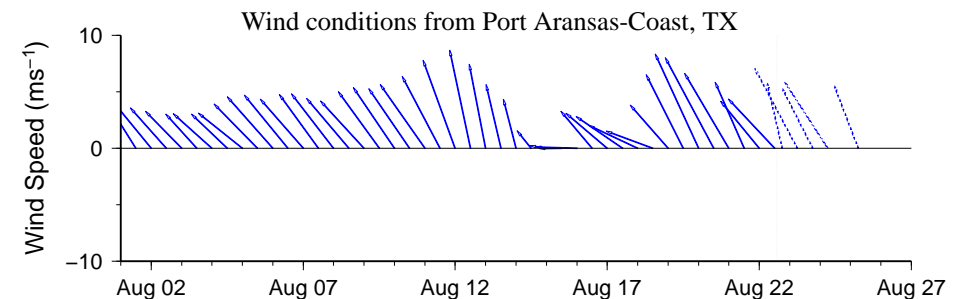
## Analysis

Sampling from the Texas A&M University's Imaging FlowCytobot, located on the Port Aransas ship channel, indicates that *Karenia brevis* ranges between 'not present' and 'very low a' concentrations (TAMU; 8/15-8/20). For information on area shellfish restrictions, contact the Texas Department of State Health Services.

Recent MODIS Aqua imagery (8/19; shown left) is partially obscured by clouds along the Texas coast, limiting analysis. Patches of elevated chlorophyll (2-8  $\mu\text{g/L}$ ) are visible along the coast from Pass Cavallo to the Rio Grande. Elevated chlorophyll is not indicative of the presence of *K. brevis* and is most likely due to the resuspension of benthic chlorophyll and sediments along the coast.

Forecast models based on predicted near-surface currents indicate a potential maximum transport of 15 km north from the Port Aransas region from August 19 to August 25.

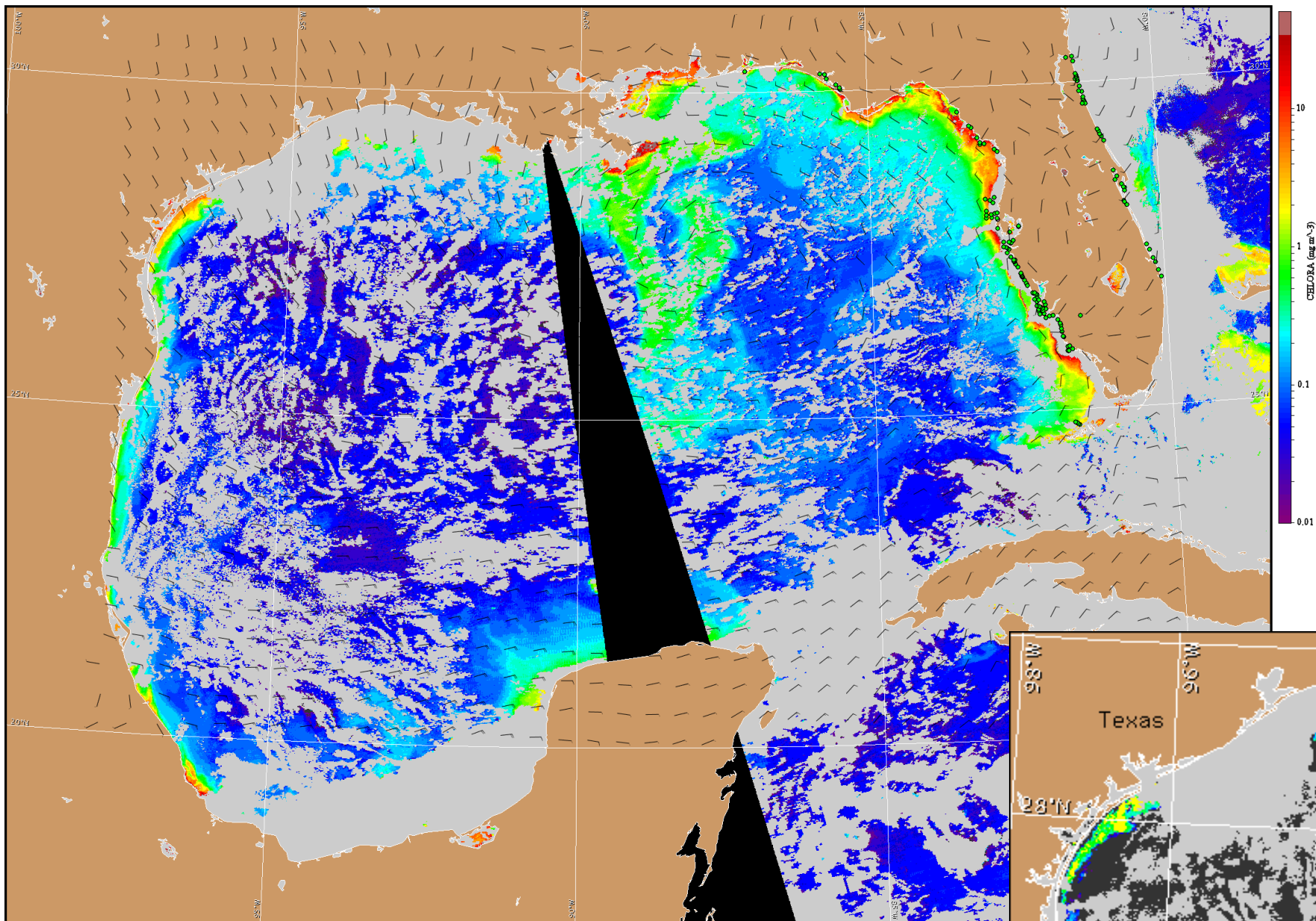
Kavanaugh, Davis



Wind speed and direction are averaged over 12 hours from buoy measurements. Length of line indicates speed; angle indicates direction. Red indicates that the wind direction favors upwelling near the coast. Values to the left of the dotted vertical line are measured values; values to the right are forecasts. Wind observation and forecast data provided by NOAA's National Weather Service (NWS).

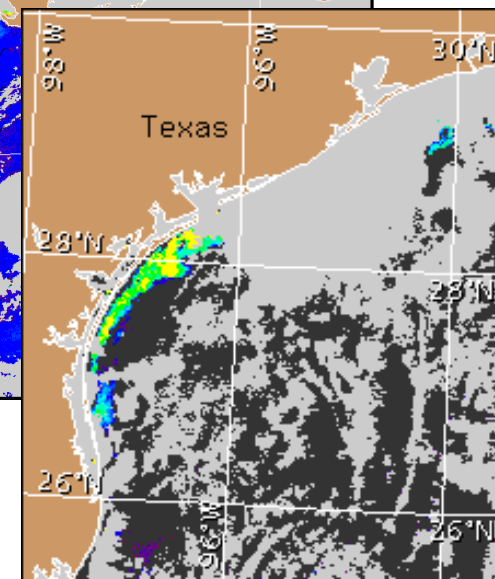
## Wind Analysis

**Port Aransas to Matagorda Ship Channel:** Southeast to south winds (5-15kn, 3-8m/s) today through Thursday becoming east winds (5-10kn, 3-5m/s) Thursday afternoon through Friday night.



Satellite chlorophyll image and forecast winds for August 23, 2016 06Z with points representing cell concentration sampling data from August 12 to 18: red (high), orange (medium), yellow (low b), brown (low a), blue (very low b), purple (very low a), pink (present), and green (not present). Cell count data are provided by Texas Parks and Wildlife Department. For a list of sample providers and a key to the cell concentration categories, please see the HAB-OFS bulletin guide:

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Verified and suspected HAB areas shown in red. Other areas of high chlorophyll concentration shown in yellow (see p. 1 analysis for interpretation).